TIMOTEC

VAPORIZED HYDROGEN PEROXIDE GENERATOR – PURITER

TECHNICAL SHEET

PURITER SPECIFICATIONS

Hydrogen peroxide vapour generator – PURITER (VHP generator) is designed for sterilization of internal surfaces by evaporation of liquid hydrogen peroxide.

Mobile equipment for decontamination of rooms and multiple facilities. Possibility of integrating the device into our isolators or interlocking booths.

Application

- **Interior surfaces of closed boxes (e.g. isolator, interlocking cabin)**
- **Interior surfaces of rooms**
- **Hygiene, disinfection**
- **sterilisation**

STANDARDS AND CERTIFICATIONS

Our production processes and products comply with international standards ISO 14937, GMP guidelines (EudraLex Volume 4), ČSN EN ISO 14644-7 standards, and other regulations, ensuring the highest quality and safety.

VARIANTS

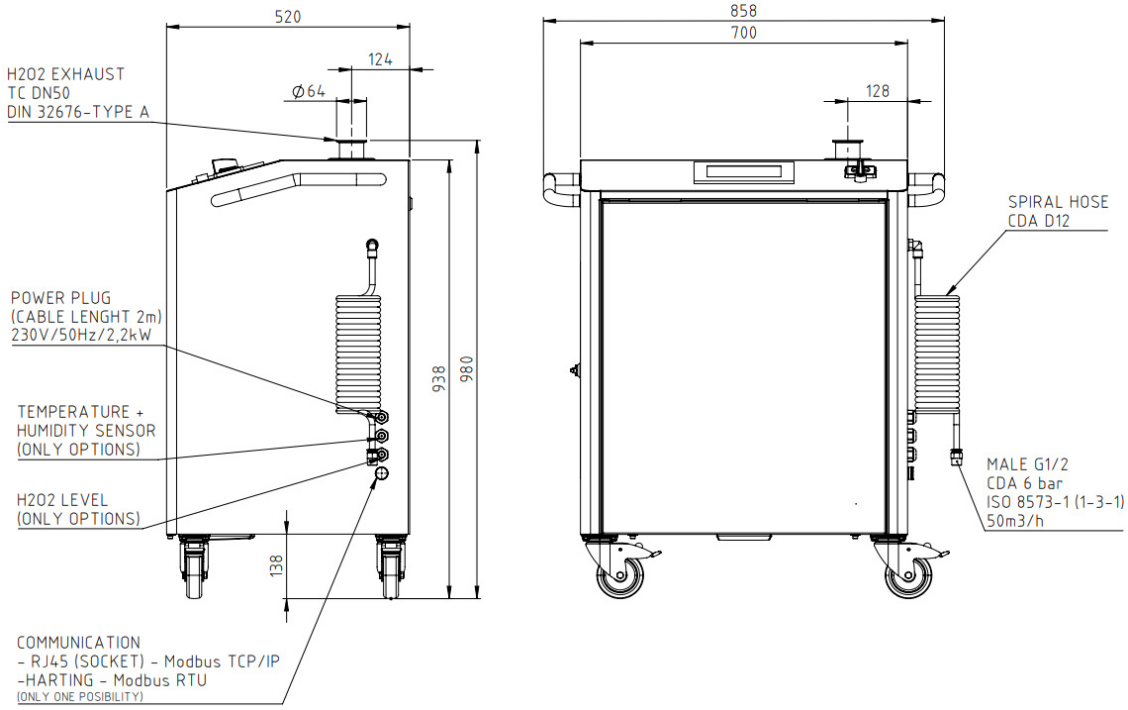
1.Developer for equipment and rooms - EXTERNAL	with manual control, without communication with the higher-level system
2. Developer for equipment and rooms with a higher-level system - EXTERNAL	communication with the master system via **Modbus TCP/IP**
3. Developer for devices and rooms with the parent system - EXTERNAL	communication with the higher-level system via **Modbus RTU**

TECHNICAL
PARAMETRY

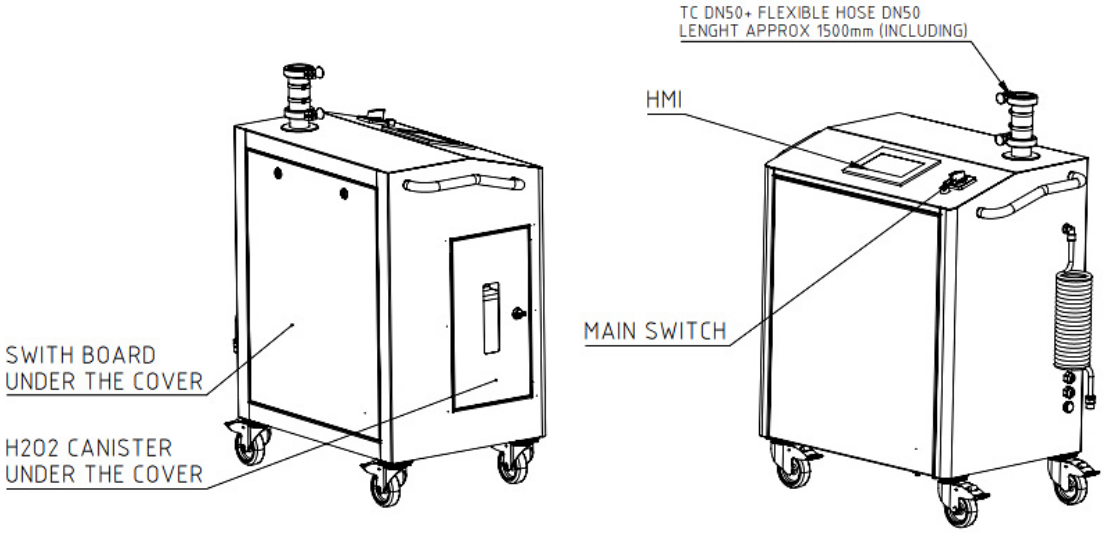
Product name	Hydrogen peroxide vapour generator - PURITER (VHP generator)
Product type	YVP
Dimensions (WxHxD)	858 x 980 x 520 mm
Equipment weight	approx. 85 kg
Air flow rate	50 m3/h
Electrical system	L+N+PE / TN-S-230 V / 50 Hz
Total installed power	2.2 kW
Coverage	IP54/IP20 - operator/others
Construction material	AISI 304 stainless steel, SB brushed finish

DIMENSIONS

Width: 860 mm
Height: 980 mm
Depth: 525 mm



BASIC DESCRIPTION



REQUIREMENTS FOR CONNECTION

Compressed air	Pressure: 6 bar Purity according to ISO 8573-1: 1-3-1
CDA Connection	External thread G1/2 (included: 2 m spiral hose CDA D12)
H_2O_2 Exhaust Connection	Clamp DN50, flange ⌀64 (included in delivery: hose DN50, L = 1.5 m with DN50 clamp end fittings, flange ⌀64)
Working Environment	Standard room conditions
Total Installed Power	2.2 kW
Total Simultaneous Power Consumption	1.54 kW
Simultaneity Factor	β = 0.7
Data communication: Modbus RTU	Addressable Harting socket with predefined address for variant No. 3
Data communication: Modbus TCP/IP	Ethernet data socket within the same network as the contr for variant No. 2
Sensors	Temperature and humidity

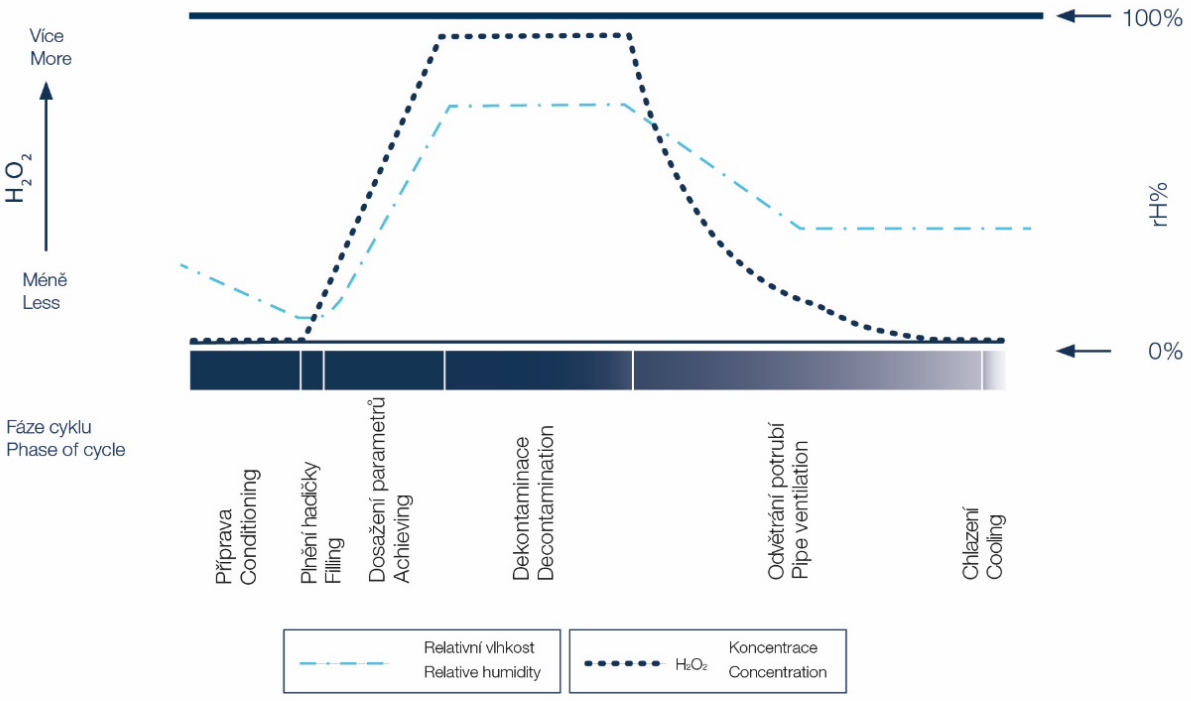
STANDARD EQUIPMENT

	1. Generator for equipment and rooms – Manual EXTERNAL	Generator for equipment and rooms – ModbusTCP/IP, EXTERNAL	3. Generator for equipment and rooms – Modbus RTU, EXTERNAL
Connection hose DN50 for exhaust of hydrogen peroxide vapour, including clamp connections (clamp DN50 with flange Ø 64 mm, stainless steel AISI 304)	✓	✓	✓
Spiral hose, outer diameter 12 mm for connection to the compressed air system	✓	✓	✓
Quick coupling with external thread G1/2	✓	✓	✓
Communication via Modbus – RTU Communication cable with Harting connector for connection to the addressable socket			✓
Communication via Modbus – TCP/IP Ethernet cable		✓	
HMI Panel SIEMENS touchscreen, SIMATIC control system	✓	✓	✓

DECONTAMINATION

Decontamination	10^{-6} reduction of microorganisms
H_2O_2 Concentration	35 %
H_2O_2 Capacity	5 l
Control	HMI touch panel, main switch

STANDARD DECONTAMINATION CYCLE



OPTIONAL ACCESSORIES

Dräger Polytron 7000

H_2O_2 Concentration Sensor
Used to maintain control over the decontamination process and to ensure safety.
LC: 1–300 ppm
HC: 1000–7000 ppm
Calibration Interval: 6 months

Installation:
- Wall-mounted
- Mounted on ducts and pipes

Rotronic

Temperature and Humidity Sensor
Essential for controlling the decontamination process.
A precise and high-quality product resistant to hydrogen peroxide vapour.

Transmitter: HF5A-31
Probe: HC2A-S-HH
Measuring range: 0–60 °C / 0–100 % RH

Installation:
- Wall-mounted